



**KENYA METEOROLOGICAL SERVICE  
DEKADAL AGROMETEOROLOGICAL BULLETIN**

**WEATHER AND CROP REVIEW FOR DEKAD 33, 2013  
21-30 NOVEMBER, 2013**

**1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE**

Rainfall activities in the country enhanced significantly both in space and Intensity compared to the previous dekad. Eastern region received the highest amount of Rainfall countrywide with Meru, Makindu, Embu and Machakos receiving rainfall amount of 163.8mm, 132.1mm, 61.6mm and 59.6mm respectively. Garissa station in North Eastern region received the highest amount of rainfall of 10.2mm. In Central region, Nyeri station recorded the highest amount of rainfall of 58.2mm. Kakamega station in Western region received received the highest amount of rainfall of 17.4mm which was a decrease according to the previous dekad. In Rift Valley region, Kericho station received the highest amount of rainfall of 18.9mm. Coastal region had Voi station reporting the highest amount of rainfall of 65.5mm. In Nairobi region, Jomo Kenyatta International Airport station received the highest amount of rainfall of 41.5mm; while Kisii station in Nyanza region reported the highest amount of rainfall of 84.3mm.

Generally, there was a slight decrease in the maximum temperature over the whole country. The highest observed maximum temperature was 35.8<sup>0</sup>C at Lodwar station. The minimum temperature too decreased significantly in the whole country. Nyahururu station in Central region reported the lowest of 9.5<sup>0</sup>C compared to the previous dekad where it recorded 9.7<sup>0</sup>C.

For a more comprehensive summary of rainfall and other meteorological parameters, see Figures 3.1 to 3.4 as shown below.

**2. CROP AND WEATHER REVIEW FOR DEKAD 33; 21-30 NOVEMBER 2013**

**2.1 NYANZA AND WESTERN REGIONS**

**2.1.1 Kakamega**

The station received rainfall amount of 17.4mm. The mean air temperature and pan evaporation were 21.4<sup>0</sup>C and 45.7mm respectively. There was no report on sunshine duration

*Beans were at harvest stage and in a good state with normal yield being expected.*

**2.1.2 Kisii**

The station recorded rainfall of 84.3mm. The mean air temperature and sunshine duration were 20.1<sup>0</sup>C and 6.6 hours respectively. Evaporation Pan report was 33.8mm.

*Maize is at flowering stage while beans were at harvest stage and both are in a fair state*

## **2.2 RIFT VALLEY REGION**

### **2.2.1 Kitale**

The station received rainfall amount of 0.8mm. The average air temperature and Evaporation Pan were 18.5°C and 43.3mm respectively. There was no report on sunshine duration.

*No phenological report.*

### **2.2.2 Eldoret-Kapsoya**

The station received rainfall amount of 0.02mm. The average air temperature and Evaporation pan reported were 16.5°C and 54.5mm respectively. There was no Sunshine.

*Farmers are harvesting their maize.*

## **2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION**

### **2.3.1 Nyeri**

The station received rainfall amount of 58.2mm. The average air temperature was 17.6°C. There was no report on pan evaporation and sunshine parameters.

*Maize and beans were both at emergence stage and in poor state.*

### **2.3.2 Kabete**

The station recorded 25.5mm of rainfall amount. The average air temperature and pan evaporation recorded were 18.4°C and 39.5mm respectively. There was no report on sunshine duration.

*Maize and beans were both emergence stage and in a fair state.*

### **2.3.3 Thika**

The station received rainfall of 58.2mm. The mean air temperature and pan evaporation recorded were 19.9°C and 39.8mm respectively. No report on sunshine duration.

*Maize, beans and potatoes were all at emergence stage.*

### **2.3.4. Nyahururu**

The station received 6.3mm of rainfall. The mean air temperature and pan evaporation recorded were 14.6°C and 31mm respectively. There was no report on sunshine.

*Maize was at maturity stage and in a good state while potatoes were at emergence stage and both crops are in fair state.*

### **2.3.5. Dagoretti**

The station received rainfall amount of 26.9mm and mean air temperature of 19.1<sup>0</sup>C respectively. Evaporation pan and sunshine duration were 39.4mm and 6.4hours respectively.

*Both maize and beans are at emergence stage and doing well.*

## **2.4 EASTERN KENYA REGION**

### **2.4.1 Meru**

The station reported rainfall amount of 163.8mm. The average air temperature and Pan Evaporation were 19.5<sup>0</sup>C and 47.3mm respectively. There was sunshine report of 5.6hrs.

*Maize and beans are at emergence stage and both are in fair state.*

### **2.4.2 Embu**

The station recorded rainfall amounts of 61.6mm. The mean air temperature was 22.9<sup>0</sup>C. There was no report on Sunshine and Pan Evaporation.

*Both maize and beans are at emergence stage and in fair state.*

### **2.4.3 Katumani (Machakos)**

The station recorded rainfall amount of 59.6mm. The average air temperature was 23.1<sup>0</sup>C. There was no report on sunshine duration and pan evaporation.

*Maize and beans were both at emergence and in fair state.*

## **2.5. COASTAL REGION**

### **2.5.1 Msabaha**

The station received rainfall amount of 23.2mm. The average air temperature and pan evaporation recorded was 27.9<sup>0</sup>C and 41.1mm respectively. There was no report on sunshine duration.

*Maize is at emergence stage and in fair state. Mangoes were at 100% fruit setting stage and in good state.*

### **2.5.2 Mtwapa**

The station received rainfall amount of 1.3mm. The average air temperature and Pan Evaporation were 27.4<sup>0</sup>C and 53.7 mm respectively. There was no report on sunshine duration.

*Maize was at emergence stage and in moderate state. Mangoes were at flowering stage and in fair state.*

### 3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

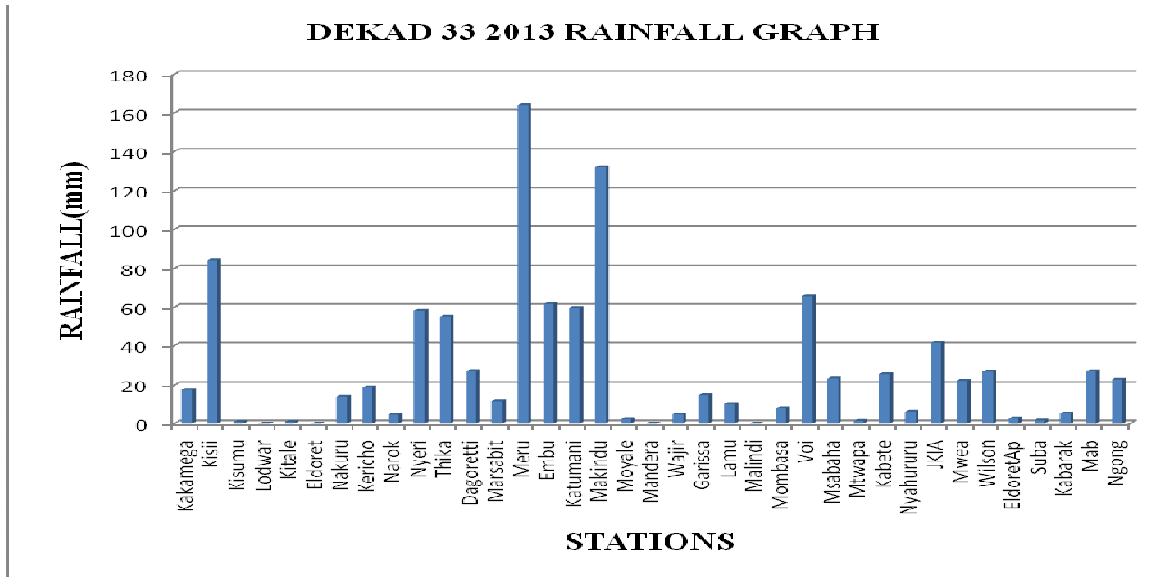


Figure 3.1: Dekadal rainfall totals for 21<sup>st</sup> to 30<sup>th</sup> November 2013

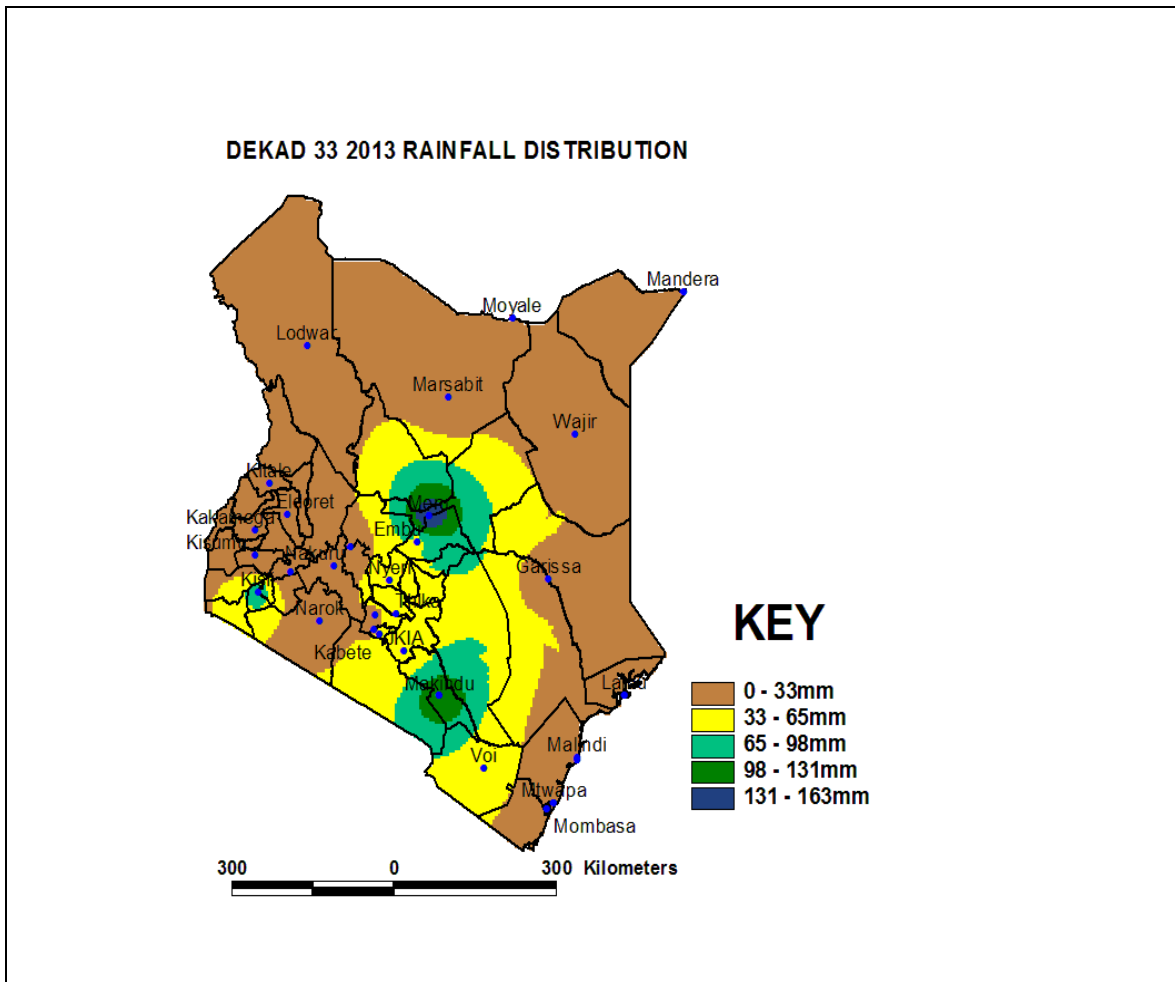


Figure 3.2: Dekadal rainfall distribution for dekad 33, 2013

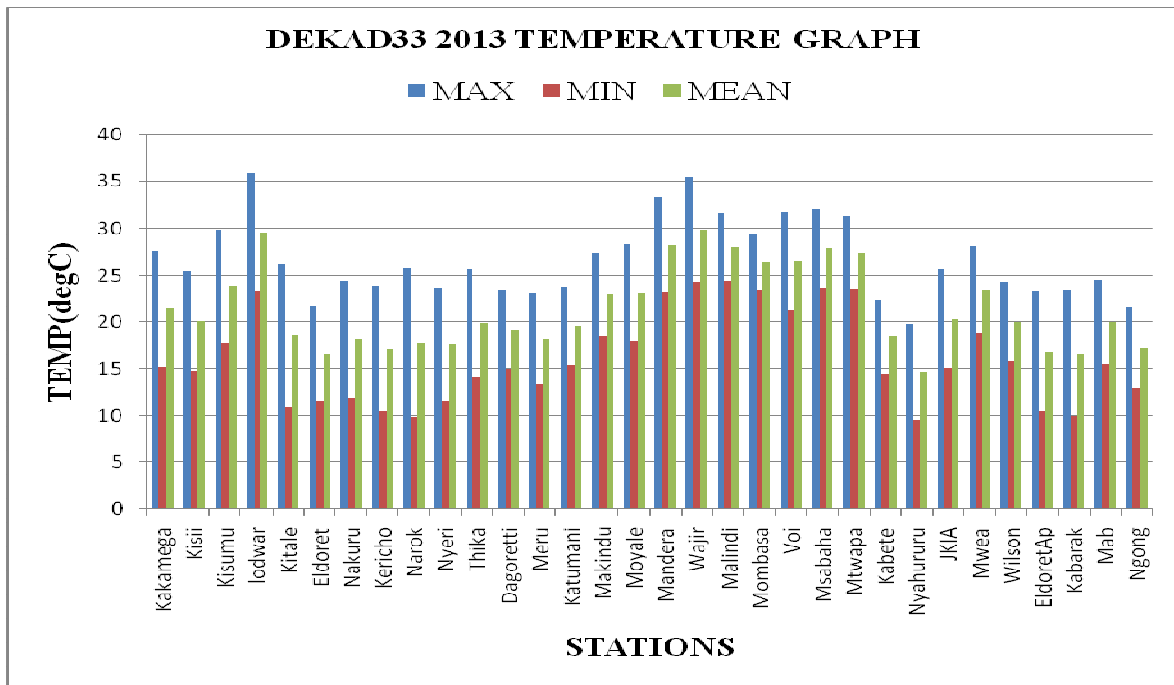


Figure 3.3: Maximum, Minimum and Average temperature in °C for dekad 33, 2013

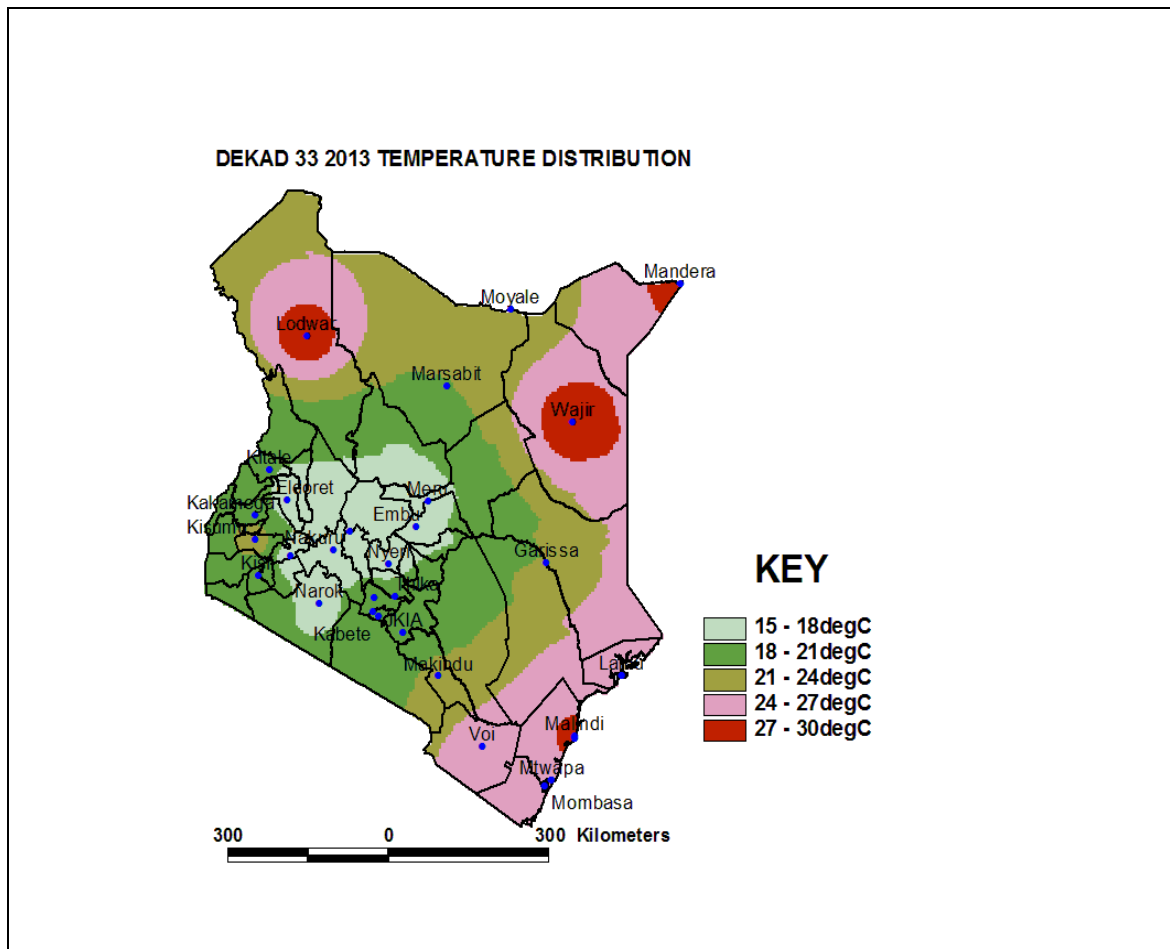
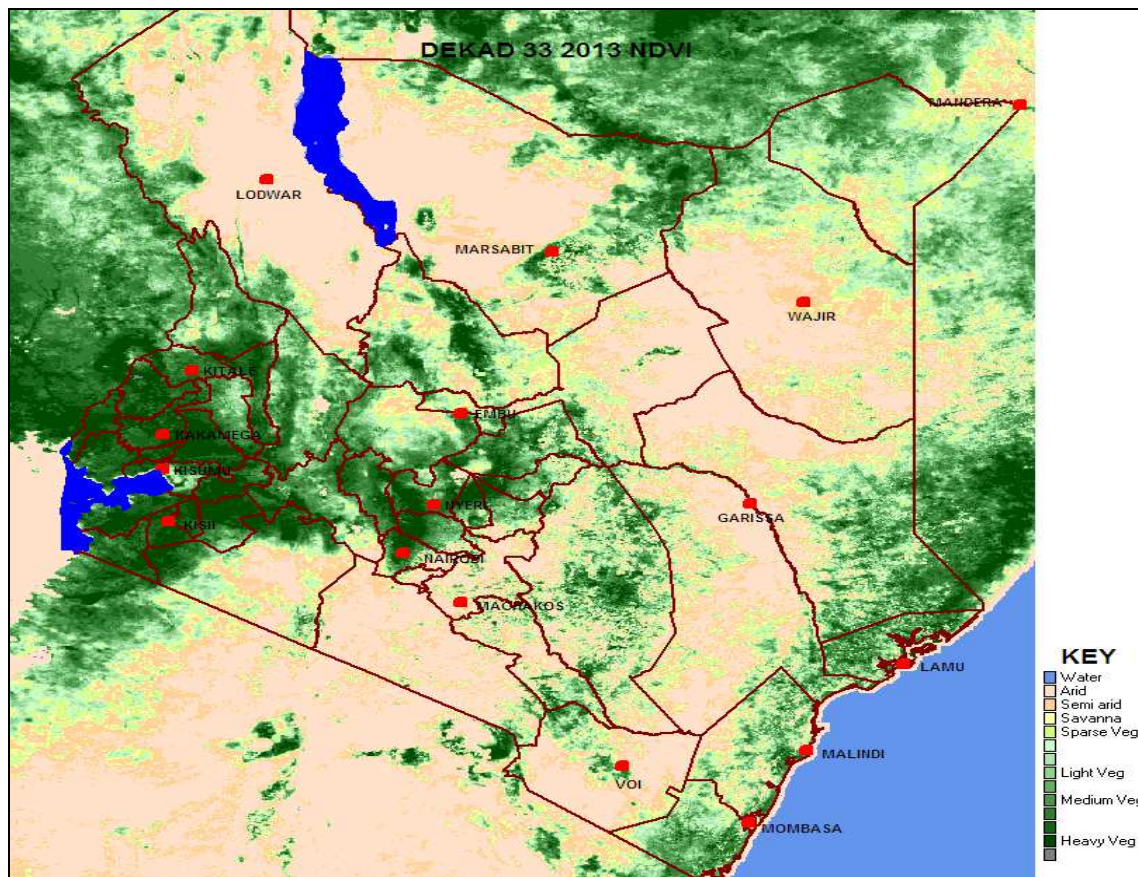


Figure 3.4: Mean temperature distribution for dekad 33, 2013



**Figure 3.5: Normalized Difference Vegetation Index (NDVI)**

#### **4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 1-10 DECEMBER 2013**

- ❖ **Counties within the Lake Victoria Basin, Highlands west of the Rift Valley, Nyamira, Kericho, Bomet, Uasin-Gishu, Nakuru, Narok, Trans Nzoia, Elgeyo Marakwet, Nandi, Laikipia, Kajiado, Vihiga and Busia),** are expected to experience sunny intervals in the morning during the forecast period. Showers and thunderstorms are likely in afternoon over several places in the forecast period.

*The showers are expected to improve the state of the crops but have a negative impact in the mature crops in the region.*

- ❖ **Over the Northwestern counties (Turkana, West Pokot and Samburu),** are expected to experience sunny intervals throughout the forecast period.

*The dry period is expected to stress the state of pasture and vegetation conditions in these counties.*

- ❖ **The Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu, Nyeri, Nairobi, Embu, Nyandarua, Tharaka and Kirinyaga),** are

expected to experience early cloudy mornings, breaking into sunny intervals and showers over few places in the afternoon throughout the forecast period.

*The expected showers will enhance the growth of the crops in the region.*

**Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa and Isiolo),** are expected to experience sunny intervals throughout the forecast period.

*The wet soil is being expected to maintain resurgence of pasture and vegetation in these counties.*

- ❖ **Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui),** are expected to experience sunny intervals in morning and afternoon showers over few places throughout the forecast period.

*The wet weather forecasted will enhance the state of pasture and vegetation in the region.*

**In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc),** are expected to experience showers over few places in the morning and sunny intervals in afternoon throughout the forecast period.

*The wet condition will improve the emerging crops in the region.*

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***For feedback or further guidance, Contact:***

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